

had been under clinical observation during the last five years. For the same period of time, that amount of clinical material (which passed through two California clinics), is without doubt far in excess of the number of similar types of cancer cases in any two other clinics, either at home or abroad. The statistical record on the results from the therapy used, in view of the recorded beneficial effects (as noted on page 178 in the March issue), suggests—whether one does or does not agree with the authors, on their points of view concerning the constitutional nature of cancer, is perhaps less important—that such extracts are worthy of careful consideration.

A scourge such as cancer, which, up to the present time has given little favorable response to the many methods of attack launched against it, offers a field for scientific study and possibilities that makes all honest endeavors to overcome this malignancy worthy of careful consideration. Doctors Coffey and Humber, in their suggestive paper, state that their percentage of patients still living at the end of five years measures up to and even exceeds the average to the credit of some of the other accepted methods of cancer treatment. Since then, when other therapy seems to be contraindicated, these investigators offer licensed physicians an opportunity to use and try out the treatment of cancer with an aqueous extract of the suprarenal gland, it would seem permissible to turn to the extract they have prepared. With a large number of independent observers keeping careful check on the results, the value of this new mode of procedure could, in proper time, be determined.

**Other State Association and Component County Society News.**—Additional news concerning the activities and work of the California Medical Association and its component county medical societies is printed in this issue, commencing on page 330.

## EDITORIAL COMMENT†

### THE THERAPEUTIC USE OF CONVALESCENT SERUM IN POLIOMYELITIS

Although many authors have cast doubts on the value of convalescent serum in the treatment of poliomyelitis, it must be frankly admitted that the case for or against this form of biologic therapy has not been made, despite vociferous argumentations. Since it is quite problematical that in the near future an active method of immunization will be developed against a disease which is conditioned by unknown and uncontrollable host factors, the serum treatment should not be discarded without further investigations. That it is not such a use—

† This department of CALIFORNIA AND WESTERN MEDICINE presents editorial comment by contributing members on items of medical progress, science and practice, and on topics from recent medical books or journals. An invitation is extended to all members of the California and Nevada Medical Associations to submit brief editorial discussions suitable for publication in this department. No presentation should be over five hundred words in length.

*Percentage of Paralyzes in Relation to the Day on Which 2,992 Patients Were Given Serum*

Beginning of the Meningeal Stage Before Treatment	Serum-Treated Cases		
	Number	Cases With Paralysis	
		Number	Per Cent
Less than 1 day....	802	33	4.1
1 day .....	913	50	5.5
2 days .....	652	44	6.7
	2,367	127	5.36
3 days .....	283	48	17.0
4 days .....	125	15	12.0
5 days .....	78	11	14.1
6 days .....	50	9	18.0
More than 6 days..	89	27	30.3
	625	110	17.6
Total .....	2,992	237	7.9

less procedure is indicated by the experiences collected during the 1934 epidemic in Denmark.<sup>1</sup>

Approximately 4,500 cases in the preparalytic and paralytic stage were hospitalized. A committee appointed in November, 1934, collected a great deal of information and issued a report on the salient features. It was published as an editorial in the *Ugeskrift for Læger*, Vol. 97, pp. 837-841, 1935.

The Danish Commission recommends as early admission to hospital as possible, and a residence in the hospital of at least three weeks. Then prompt serum treatment in the hospital, with an average dose of one cubic centimeter per kilogram bodyweight. *It is emphasized that repetition of an injection—if necessary, a larger dose—is imperative on the slightest sign of progress of the disease.*

The donors of the serum were paralytic, aparetic and abortive cases of poliomyelitis. The paralytics were bled on an average on the twenty-ninth day, the aparetic cases on the twenty-sixth day, and the abortive cases on the thirtieth day after the onset of the disease. Nearly 80 per cent of all the patients admitted to a hospital were given serum by intravenous or intramuscular route. As a rule, the serum was reserved for the cases aparetic at the time of the administration. No final conclusions could be drawn as to the efficacy of the serum. The data summarized in the above table, which shows the frequency with which serum-treated patients developed paralysis, suggest that the treatment played a significant part in preventing paralysis.

Convalescent serum was not used prophylactically. However, a concentrated hyperimmune horse serum was used in two soldiers' camps. In one of them all the five hundred soldiers were given five cubic centimeters of the horse serum intramuscularly; in the other camp, only about half the soldiers, or two hundred, were treated in the same way. Since no cases occurred in the treated or untreated group, the results were negative.

Hooper Foundation,  
University of California.

K. F. MEYER,  
San Francisco.

<sup>1</sup> Jensen, Claus: *Proc. Roy. Soc. Med.*, 28:1007, 1935.